



myTEM FT Base Modul
MTBAS-100-FT

The FT Base Modul is used to expand your smart home system with products from the myTEM Free Topology range. Such products are for example the FT DIN SIX, the FT Switch Dual, the FT Switch Dimmer or the FT RGBW Module.

The FT Base Modul is connected to the CAN bus from the Smart Server or Radio Server, while the Free Topology products are connected via the CFT bus. The Free Topology products can be integrated with the extremely powerful myTEM ProgTool.

Further information can be found on our website:
<https://www.mytem-smarthome.com/web/en/download>



ATTENTION:

This device is not a toy. Please keep it away from children and animals!

Please read the manual before attempting to install the device!

These instructions are part of the product and must remain with the end user.

Warning and safety instructions

WARNING!

This word indicates a hazard with a risk that, if not avoided, can result in death or serious injury. Work on the device must only be carried out by persons with the necessary training or instruction.

CAUTION!

This word warns of possible damage to property.

SAFETY INSTRUCTIONS

- Operate this device only as described in the manual.
- Do not operate this device if it has obvious damage.
- This device shall not be altered, modified or opened.
- This device is intended for use in buildings in a dry, dust-free location.
- This device is intended for installation in a control cabinet. After installation, it must not be openly accessible.

DISCLAIMER

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The manufacturer, TEM AG, is not liable for any loss or damage caused by failure to follow the instructions in the manual.

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Product description

The FT Base Modul is used to expand your smart home system with products from the myTEM Free Topology range. Such products are for example the FT DIN SIX (reading of digital and analogue signals), the FT Switch Dual (two relays for motors, switches, etc.), the FT Switch Dimmer (dimming of lights) or the FT RGBW Module (control of RGBW lights).

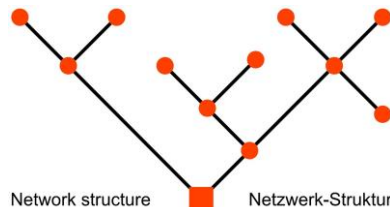
The FT Base Modul is powered with 24 VDC and the CAN bus is connected to a Smart Server or Radio Server. The myTEM Free Topology products are connected via the CFT bus.

Applications:

- Central interface between myTEM SmartHome and myTEM Free Topology devices.
- Wiring according to the tree topology. The device has two independent CFT bus interfaces (e.g. wiring of first and second floor).
- The CFT terminals each have four connection points for distribution to other devices. These terminals can be pulled upwards for easy replacement of the device.
- Operation via the central server

Functions:

- Supply voltage device 24 VDC ± 10%
- CAN bus for communication to the Smart Server or Radio Server. Several FT Base Modules are possible on the CAN bus, e.g. for separately wiring different floors or apartments.
- Two independent CFT (Free Topology) buses with 4-pole push-in support terminals for further wiring.
- The CFT buses use free wiring according to the tree topology as indicated in the picture below.



Installation

WARNING! Depending on national safety standards, only authorized and/or trained technicians may be allowed to make electrical installations on the power supply. Please inform yourself about the legal situation before installation.

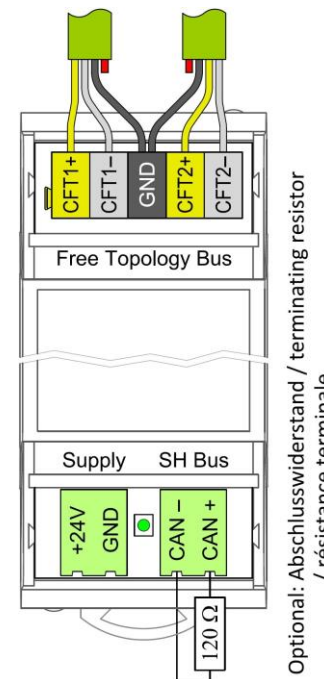
WARNING! The myTEM FT Base Modul shall be installed in a control cabinet in compliance with relevant national safety standards.

WARNING! The device shall be connected according to the wiring diagram only.

WARNING! To avoid electrical shock and/or equipment damage, disconnect power to the main fuse or circuit breaker before installation or maintenance. Prevent the fuse from being accidentally switched on again and check that the system is de-energized.

Please install the device according to the following steps:

- For your safety, switch off the mains voltage (break fuse) during installation. Make sure that wires are not short-circuited during and after installation, as this may damage the device.
- Connect the device according to the circuit diagram of the myTEM ProgTool or the terminal assignment from the picture below. In order to use the device, a connection via the CAN bus to a Smart Server or Radio Server is required.
- CAUTION!** The device shall only be operated with stabilized power supplies (24 VDC). Connecting to higher voltages will damage the device. Use up to 2.5 mm² wires for supply and the CAN bus, stripped by 7 mm.
- Use solid wires (Ø0.8 mm) for the CFT bus and ground (GND), stripped by 5 to 6 mm. Insert the conductors until they hit the backstop.
- Check the wiring and then switch on the mains voltage.
- Include the device with the myTEM ProgTool to the server.



Optional: Abschlusswiderstand / terminating resistor / résistance terminale

Quick trouble shooting

The following hints may help solving trouble:

- Make sure that the power supply is connected with the correct polarity. With wrong polarity the device does not start.
- Make sure that the voltage has not dropped below the allow operating voltage.
- If a device cannot establish communication to the Smart Server or the Radio Server, check if the CAN bus (+/-) is correctly wired and the ground (GND) is connected. A missing wiring ground connection (usually available via power supply) can affect the communication.
- If a device cannot establish communication to the Smart Server or the Radio Server, check whether the terminating resistor of 120 Ω at the last device is connected to the CAN bus. If missing, please add it via terminals (CAN +/-).

NOTE: To release a wire from the push-in terminal, hold it firmly and pull it out of the terminal by simultaneously twisting it back and forth.

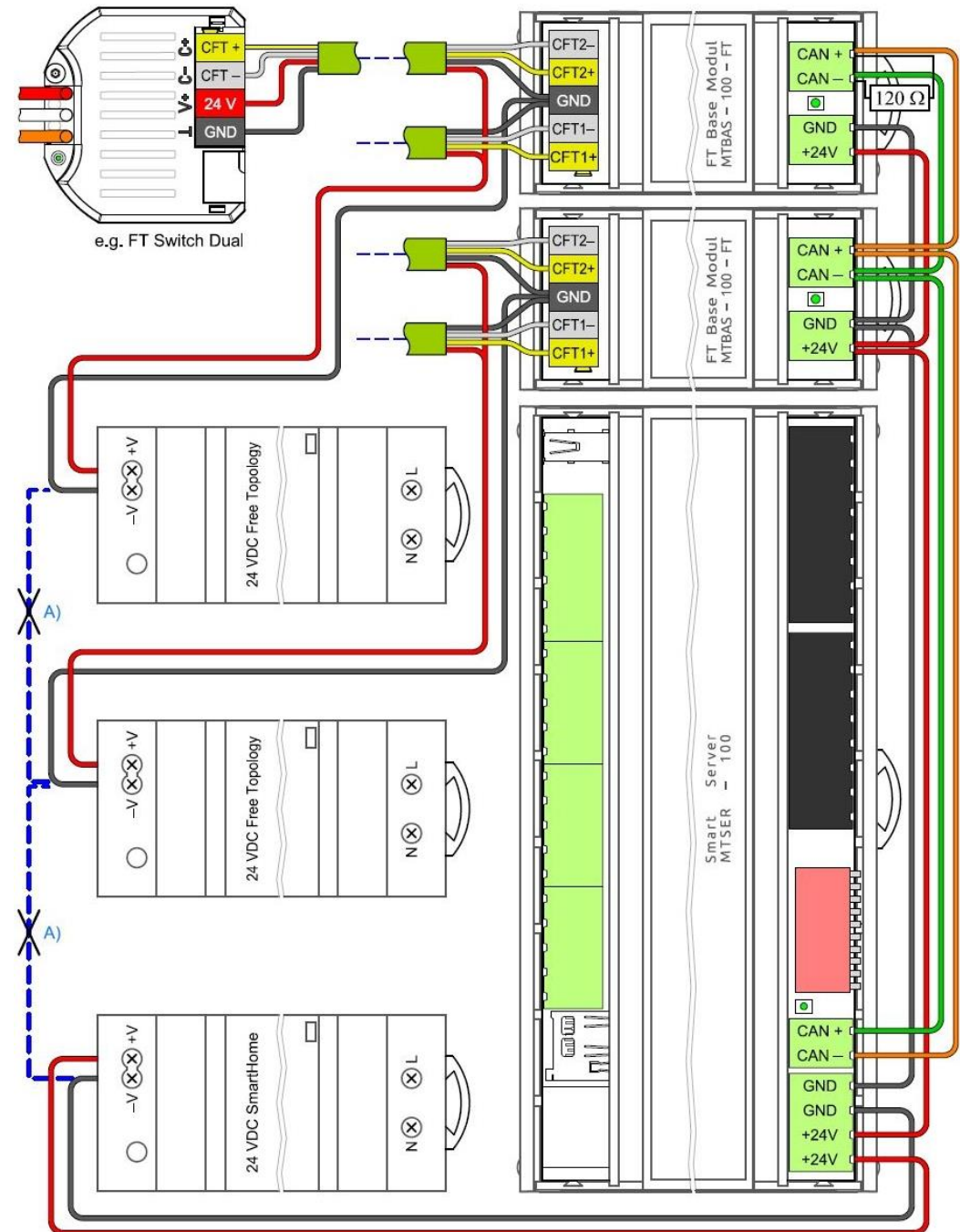
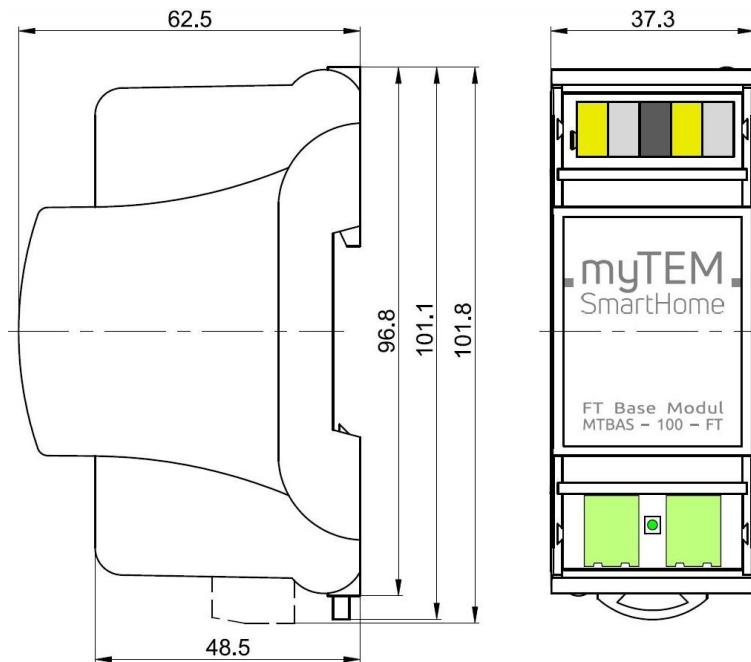
LED display

The LED next to the antenna may show the following states:

- LED green:** Device started and connection to Smart Server or Radio Server working
- LED red:** Device started but no connection to the Smart Server or Radio Server
- LED off:** Device not powered, not started or broken

Technical specifications

Dimensions (W x H x D)	37.3 x 101.1 x 62.5 mm (height with connectors at bottom 101.8 mm)	
Installation / mounting	On 35 mm DIN rail	
Operating voltage	24 VDC ± 10%	
Power consumption in standby	Continuous operation, therefore no standby operation	
Power consumption in operation	0.28 W	
Ambient temperature for operation	0 °C – 50 °C	
Ambient temperature for storage	-20 °C – 60 °C	
Ambient humidity	5 %RH – 85 %RH (non condensing)	
Wire cross-section connectors	0.25 mm ² – 2.5 mm ²	
Stripping length for connectors	ca. 7 mm	
Tightening torque for connectors	0.5 Nm	
Wire cross-section 4-pole push-in terminals	0.6 mm – 0.8 mm solid, when using identical conductor diameters – 1.0 mm solid	
Stripping length for 4-pole push-in terminals	5.0 mm – 6.0 mm	
Degree of protection provided by enclosure	IP 20 (after installation)	(according to EN 60529)
Protection class	III	(according to EN 60730-1)
Overvoltage category	I	(according to EN 60730-1, resp. EN 60664-1)
Pollution degree	2	(according to EN 60730-1)
Electrical safety	EN 60730-1:2016 + A1:2019	
EMC	EN 60730-1:2016 + A1:2019 EN IEC 61000-6-2:2019	EN 61000-6-3:2007 + A1:2011 / AC:2012
RoHS	EN IEC 63000:2018	
CE conformity	2014/30/EU (EMC)	2011/65/EU (RoHS)



A) The ground of a supply shall only be connected to a single point! If more than one supply is present, the ground should not be connected between the supplies to avoid ground loops.